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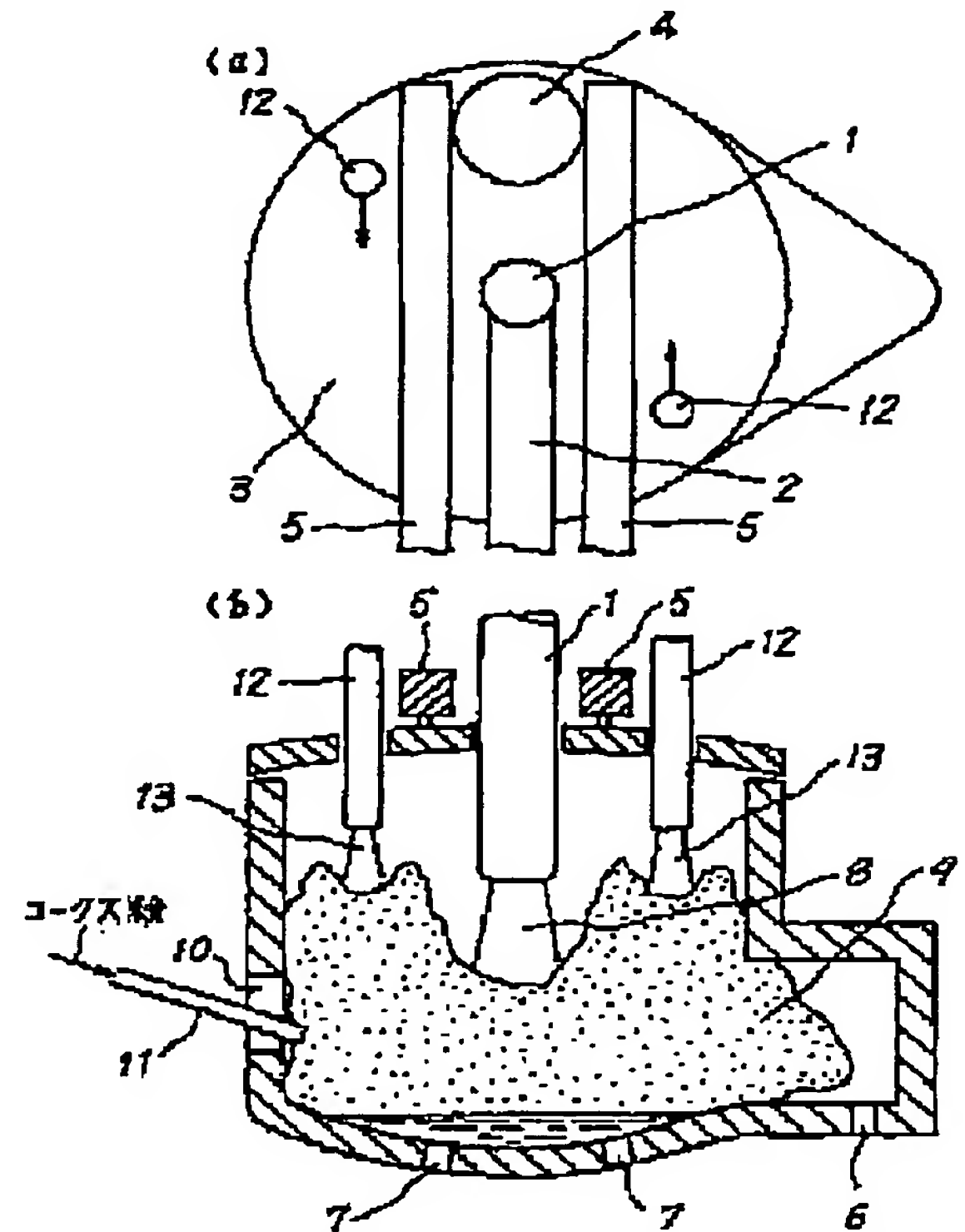
APPLICATION DATE : 05-12-94  
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APPLICANT : DAIWA STEEL KK;

INVENTOR : UEDA ARATA;

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TITLE : ARC FURNACE FOR STEELMAKING  
AND ITS OPERATION



ABSTRACT : PURPOSE: To enable the melting operation in a shorter time and to achieve a high speed melting refining of scrap with easy operation.

CONSTITUTION: In an arc furnace for steelmaking, one or more burner lances 12 inserted in a furnace and possible to jet gaseous oxygen or oxygen-containing gas singly or together with fuel gas are provided movably in the height direction of the furnace. Since the burner lance is a multi-functional lance which can simultaneously jet fuel gas, gaseous oxygen, etc., over a period from the melting stage to the refining stage in the electric arc furnace operation, flame jet for heating the scrap, gaseous oxygen jet for oxidized melt-down, the gaseous oxygen jet for secondary combustion and the supply of carbonaceous material and refining material can be executed with one piece of the burner lance while executing arc-heating. Therefore, the stop of electric power, pulling-up of the upper electrodes and exchange of the lance are unnecessary.

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